

Region 3 GPRA Baseline RCRA Corrective Action Facility

Motiva Enterprises LLC (Formerly: Star Enterprises)

**2000 Wrangle Hill Rd.
Delaware City, DE 19706
Congressional District 1
EPA ID #: DED002329738
Last Updated: 12/03/2003**

Current Progress at the Site

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EPA issued a HSWA permit to Motiva Enterprises LLC (formerly Star Enterprise), in November 1988. In September 2003, DNREC issued a Corrective Action Permit to Motiva. A total of 33 SWMUs have been identified at the facility. The facility performed a verification investigation which concluded that soil and groundwater contamination with metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) exist at the site. The Phase I RFI workplan to determine the extent of contamination was approved in December 1999. In March 2000, Motiva submitted part of the final report. Additional portions were submitted during summer 2000. EPA and DNREC provided comments on the Phase I RFI in May 2001. In July 2001, a meeting to discuss the comments and further actions was held. A revised report will be submitted to EPA and DNREC by January 2004. Also, Motiva performed an ecological reconnaissance during the fall of 2001. The information collected during this activity will be incorporated in the revised Phase I RFI report. Motiva submitted a report summarizing the findings of the ecological reconnaissance in June 2002, and a Plan for an ecological risk assessment in June 2002. The 2003 DNREC Corrective Action Permit required Motiva to perform an interim measure to address two (2) SWMUs identified by the ecological reconnaissance report as potentially impacting the environment. In addition, Motiva submitted draft Environmental Indicator (EI) Forms in June 2002.

During the Phase I RFI investigation, floating free-phase hydrocarbon was found in ground water in some areas. Motiva installed a free-phase hydrocarbon recovery system in 1994. Two (2) areas in the eastern portion of the facility have a free phase hydrocarbon recovery system operating at this time. EPA and DNREC required that ground water investigations at these areas be performed on an accelerated schedule so that interim clean-up measures can be identified and implemented as soon as possible. Motiva's August 1999 report identified six (6) areas at the refinery with free-phase hydrocarbon floating on the water table. Also, methyl-tert-butyl-ether (MTBE) was detected in groundwater. Motiva installed more monitoring wells in the fall of 2002 to better define the dissolved phase hydrocarbon plume(s), according to their approved plan. The final report is due in early 2004.

The Environmental Indicator Forms discuss that current human exposure to site contaminants is under control, and that further data is needed to determine whether migration of contaminated ground water is under control.

Site Description

The Motiva refining facility is located on 5,050-acres approximately 1-mile northwest of Delaware City, Delaware. The facility commenced operation in 1955. It has the capacity to process a variety of crude oils. Products generated from the operation have included a wide variety of diesel, gasoline, jet, fuel oil, aromatics, methanol and propane fuels. The land north and south of the refinery is mostly farmland, with the exception of several industrial complexes (some are RCRA and Superfund sites) located immediately north and west of the refinery. The eastern property boundary borders the Delaware River.

Site Responsibility

RCRA Corrective Action activities at this facility are being conducted under the direction of the Delaware Department of Natural Resources and Environmental Control (DNREC) with assistance from EPA Region 3.

Contaminants

The main contaminants in the groundwater, soils and sediments are benzene, toluene, ethylbenzene, xylene (BTEX), some metals and petroleum hydrocarbons compounds, including MTBE in ground water. Chlorinated hydrocarbons found in ground water in an area on-site are attributed to a neighboring facility.

Community Interaction

There has not been extensive public interest regarding corrective action activities at the site. Once remediation activities are proposed, the public will have the opportunity to review and comment on any proposed action to be performed at the site. Also, when the RCRA Corrective Action permit was reissued in 2003, the public was given the opportunity to review and comment on permit activities.

Government Contacts

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For more information about EPA's corrective action webpage, including Environmental Indicators, please visit our site at: www.epa.gov/reg3wcmd/correctiveaction.htm

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